

Title (en)  
COMPONENT MOUNTING MACHINE AND METHOD FOR DETERMINING DROPPING OF COMPONENT

Title (de)  
BESTÜCKUNGSMASCHINE UND VERFAHREN ZUR BESTIMMUNG DES FALLENLASSENS EINES BAUTEILS

Title (fr)  
MACHINE DE MONTAGE DE COMPOSANT ET PROCÉDÉ DE DÉTERMINATION DE CHUTE DE COMPOSANT

Publication  
**EP 3687268 B1 20230405 (EN)**

Application  
**EP 17926140 A 20170922**

Priority  
JP 2017034378 W 20170922

Abstract (en)  
[origin: EP3687268A1] A component mounting machine including: a component supply device configured to supply a component to a supply position; a component transfer device configured to use a component mounting tool to pick up the component from the supply position and mount the component on a board; a component detecting section configured to detect whether the component is present at the supply position before or while the component is being picked up by the component mounting tool; a holding detecting section configured to detect whether the component mounting tool is holding the component following pickup; and a remaining detecting section configured to detect whether the component remains at the supply position in a case in which it is detected by the holding detecting section that the component is not being held by the component mounting tool; and a dropped determining section configured to determine whether the component has dropped based on a detection result of the component detecting section, a detection result of the holding detecting section, and a detection result of the remaining detecting section.

IPC 8 full level  
**H05K 13/02** (2006.01); **H05K 13/04** (2006.01); **H05K 13/08** (2006.01)

CPC (source: EP US)  
**H05K 13/02** (2013.01 - US); **H05K 13/0409** (2018.07 - US); **H05K 13/0413** (2013.01 - US); **H05K 13/0417** (2013.01 - EP);  
**H05K 13/0452** (2013.01 - US); **H05K 13/0812** (2018.07 - EP US); **H05K 13/082** (2018.07 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3687268 A1 20200729**; **EP 3687268 A4 20200902**; **EP 3687268 B1 20230405**; CN 111096097 A 20200501; CN 111096097 B 20210518;  
JP 6838166 B2 20210303; JP WO2019058530 A1 20200409; US 11350550 B2 20220531; US 2020214184 A1 20200702;  
WO 2019058530 A1 20190328

DOCDB simple family (application)  
**EP 17926140 A 20170922**; CN 201780094858 A 20170922; JP 2017034378 W 20170922; JP 2019542931 A 20170922;  
US 201716647961 A 20170922